

I CLAIM:

1. In a method of detecting fraud in a wireless communications system, the system including a carrier facility and a plurality of wireless communications devices, each wireless

5 communications device providing identification data to the carrier facility used by said facility in detecting fraudulent use of the device, the identification data comprising a plurality of symbols, each wireless device sending voice data corresponding to a user's voice to the carrier facility, an improvement comprising: altering the voice data to steganographically embed verification data therein, said verification data comprising a plurality of symbols; 10 steganographically detecting said verification data from the voice data at the carrier facility, and using said detected verification data to confirm authorized use of the wireless device, wherein the user's voice data serves as the carrier of the verification data from the wireless device to the carrier facility.

15 2. The method of claim 1 in which the verification data and the identification data include a plurality of shared symbols in common, and the method includes checking the identification data and the verification data for correspondence between said shared symbols.

20 3. The method of claim 1 which includes modulating an intermediate carrier signal with data corresponding to the user's voice, and in which said altering alters said intermediate carrier signal to steganographically embed the verification data therein.

25 4. The method of claim 1 in which the voice data is an analog signal.

5. The method of claim 1 in which the voice data is a digital signal.

6. In a wireless personal communications transceiver, said transceiver including a microphone coupled to a transmitter and a receiver coupled to a speaker, the transceiver including means for transmitting a wireless signal modulated with a voice signal

corresponding to a user's voice, an improvement comprising means for altering said voice signal to steganographically embed a multi-symbol auxiliary data string therein, wherein transmission of the wireless voice signal also conveys the auxiliary signal hidden therein.

5 7. The transceiver of claim 6 which includes altering the voice signal at baseband.

8. The transceiver of claim 6 which includes modulating an intermediate carrier signal to produce a voice signal at a frequency band above baseband, and altering the modulated signal to steganographically embed the multi-symbol auxiliary data string therein.

10

9. The transceiver of claim 6 in which the voice signal is a digital signal.

10. The transceiver of claim 6 in which the auxiliary data string comprises data used by a carrier facility to identify fraudulent use of the transceiver.

Add A²

Inv. A²

Add B²